

# (12) United States Patent

## Sherman

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#### (54)WIRELESS COMMUNICATOR FOR LAPTOP **COMPUTERS**

Inventor: Itay Sherman, Hod Hasharon (IL)

Assignee: Google Inc., Mountain View, CA (US)

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(52) **U.S. Cl.** ...... 455/556.1; 455/41.2

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See application file for complete search history.

#### (56)References Cited

### U.S. PATENT DOCUMENTS

5,625,673 A	4/1997	Grewe et al.
5,628,055 A	5/1997	Stein
5,809,115 A	9/1998	Inkinen
5,893,037 A	4/1999	Reele et al.
5,907,815 A	5/1999	Grimm et al.
5,983,073 A	11/1999	Ditzik
6,188,917 B1	2/2001	Laureanti
6,201,867 B1	3/2001	Koike
6,243,578 B1	6/2001	Koike

#### 6,477,357 B1 11/2002 Cook 6,516,202 B1 2/2003 Hawkins et al. 6,640,113 B1 10/2003 Shim et al. 6,690,947 B1 2/2004 Tom (Continued)

### FOREIGN PATENT DOCUMENTS

1871075 A1 12/2007 EP (Continued)

### OTHER PUBLICATIONS

Kineto Wireles, Inc., The Dual-Mode Handset Opportunity, How the 3GPP UMA standard enables mobile operators to embrace the cost and performance advantages of broadband, VoIP and Wi-Fi access technologies, Jan. 2007, A Kineto White Paper; http://www.kineto. com/products/downloads/kineto\_wp\_UMA\_DMH\_2007.pdf.

Primary Examiner — Temesgh Ghebretinsae Assistant Examiner — Gennadiy Tsvey (74) Attorney, Agent, or Firm — Soquel Group LLC

#### (57)ABSTRACT

A communication system including a wireless communicator including a baseband modem for connecting to the Internet via a cellular network, and a connector for physically connecting the wireless communicator to a laptop computer port, and a laptop computer including a wireless modem for communicating in a wireless mode with the wireless communicator, a port for physically connecting the wireless communicator to the laptop computer and for communicating in a wired mode with the wireless communicator, and a connection wedge, wherein the laptop computer connects to the Internet via a link between the laptop computer and the wireless communicator, and wherein the connection wedge selectively uses the wired mode or the wireless mode for the link according to whether or not the wireless communicator is physically connected to the laptop computer, respectively. A method is also described and claimed.

### 13 Claims, 9 Drawing Sheets

